Title (en)

SELF-LIGATING ORTHODONTIC BRACKETS INCLUDING A LIGATION COVER BIASED TOWARD AN OPEN OR CLOSED POSITION

Title (de)

SELBSTLEGIERENDES ORTHODONTISCHES BRACKET MIT EINER ABDECKUNG DEREN SCHLIESS- UND ÖFFNUNGSBEWEGUNG UNTERSTÜTZT WIRD

Title (fr)

VERROUS ORTHODONTIQUES AUTO-LIGATURANTS COMPORTANT UN ELEMENT DE RECOUVREMENT SOLLICITE PAR UN RESSORT, DE SORTE QU'IL SE METTE EN POSITION OUVERTE OU FERMEE

Publication

EP 1359859 A1 20031112 (EN)

Application

EP 01982640 A 20010911

Priority

- IB 0102107 W 20010911
- US 78452501 A 20010215
- US 91473701 A 20010829

Abstract (en)

[origin: WO02064050A1] Self ligating orthodontic brackets include a bracket base and a flexible ligation cover to provide dynamic active ligation of the arch wire during tooth realignment. A bearing protrucion (238) extends from the underside of the cover (234) so as to partially extend into an arch wire slot (233) within the base (232) when the cover (234) is in a closed position relative to the base (232). The resilient flexibility of the cover (234) permits it to flex upwardly to absorb mechanical energy from the arch wire (240). The resilient of the cover (234) allows it to return to its original configuration as the arch wire (240) becomes more fully seated with the slot (233) as a result of realignment of a tooth, thereby maintaining contact with the arch wire (240) to provide dynamic active ligation.

IPC 1-7

A61C 7/28

IPC 8 full level

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CPC (source: EP US)

A61C 7/125 (2013.01 - EP US); **A61C 7/28** (2013.01 - EP US); **A61C 7/285** (2013.01 - EP US); **A61C 7/30** (2013.01 - EP US)

Citation (search report)

See references of WO 02064049A1

Cited by

EP3143960A1; US9867678B2; US11219507B2; US10405950B2; US9987105B2; US10682207B2; US9872741B2; US10231802B2; US10045834B2; US11382719B2

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DOCDB simple family (publication)

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IB 0102110 W 20010911; AT 01974590 T 20010911; AT 01980825 T 20010911; AT 01982640 T 20010911; BR 0116894 A 20010911; BR 0116897 A 20010911; CA 2437964 A 20010911; CA 2438236 A 20010911; CN 01823128 A 20010911; CN 01823129 A 20010911; DE 60111959 T 20010911; DE 60127720 T 20010911; DE 60127722 T 20010911; EP 01974590 A 20010911; EP 01980825 A 20010911; EP 01982640 A 20010911; IB 0101913 W 20010911; IB 0102106 W 20010911; IB 0102107 W 20010911; JP 2002563849 A 20010911; MX PA03007289 A 20010911; MX PA03007292 A 20010911; US 95257801 A 20010912